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## NOTICE OF ALLOWANCE AND FEE(S) DUE

25006

PO BOX 7021

TROY, MI 48007-7021

7590

06/22/2010

GIFFORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C

**EXAMINER** BRAINARD, TIMOTHY A ART UNIT PAPER NUMBER

3662

DATE MAILED: 06/22/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,632	04/05/2006	Johann Hipp	MFA-20302/04	4098

TITLE OF INVENTION: DISTANCE MEASUREMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:** 

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificate	correspondence includired below or directed other	ng the Patent, advance of herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	maintenance fees wil spondence address; a	I be mailed to the curren nd/or (b) indicating a sep	t correspondence address as arate "FEE ADDRESS" for	
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GIFFORD, KR PO BOX 7021 TROY, MI 4800	ASS, SPRINKLE 17-7021	,ANDERSON & (	CITKOWSKI, P.Che Stat addı tran	reby certify that this es Postal Service wit ressed to the Mail Service to the USPTO	Ficate of Mailing or Transection Fee(s) Transmittal is being h sufficient postage for fifted FEE address D (571) 273-2885, on the control of the feet and the fee	smission g deposited with the United rst class mail in an envelope above, or being facsimile date indicated below.	
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	. A	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/574,632	04/05/2006	•	Johann Hipp	•	MFA-20302/04	4098	
ITTLE OF INVENTION	: DISTANCE MEASUR	EMENT					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE I	FEE TOTAL FEE(S) DUI	E DATE DUE	
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/22/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]			
BRAINARD,	ТІМОТНҮ А	3662	356-005010	-			
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>			(1) the names of up to or agents OR, alternation (2) the name of a single registered attorney or a 2 registered patent atto	2. For printing on the patent front page, list  1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  2) the name of a single firm (having as a member a registered attorneys or agent) and the names of up to the registered patent attorneys or agents. If no name is isted, no name will be printed.			
PLEASE NOTE: Unl recordation as set forth (A) NAME OF ASSIG	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee oletion of this form is NO	T a substitute for filing an  (B) RESIDENCE: (CITY	atent. If an assignee assignment.  7 and STATE OR CO	UNTRY)	document has been filed for	
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Corp	poration or other private gr	oup entity Government	
4a. The following fee(s) are submitted:  Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	rd. Form PTO-2038 i	s attached.		
5. Change in Entity Stat	<b>tus</b> (from status indicated s SMALL ENTITY statu	*	☐ b. Applicant is no lon	gor claiming SMALL	ENTITY status. See 37 C	TEP 1 27(α)(2)	
••						he assignee or other party in	
Authorized Signature				Date			
Typed or printed name				_	•		
This collection of inform an application. Confident submitting the completed his form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to th NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiving Chief Information Office COMPLETED FORMS TO	retain a benefit by the timated to take 12 mi vidual case. Any com er, U.S. Patent and Tr O THIS ADDRESS.	public which is to file (an nutes to complete, includi ments on the amount of ti rademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and ime you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450,	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/574,632	04/05/2006	Johann Hipp	MFA-20302/04	4098	
25006 75	590 06/22/2010		EXAM	INER	
GIFFORD, KRA	SS, SPRINKLE,AN	BRAINARD, TIMOTHY A			
PO BOX 7021			ART UNIT	PAPER NUMBER	
TROY, MI 48007-7021			3662		
			DATE MAILED: 06/22/2010		

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/574,632	HIPP, JOHANN	
Notice of Allowability	Examiner	Art Unit	
	TIMOTHY A. BRAINARD	3662	
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communica IGHTS. This application is subje	application. If not included tion will be mailed in due course. <b>THIS</b>	
2. X The allowed claim(s) is/are 34,35,38-42,45,48-54,56-62 are	nd 65 60		
<ul> <li>3.</li></ul>	nder 35 U.S.C. § 119(a)-(d) or (f) been received. been received in Application No	)	
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EXAMIN	IER'S AMENDMENT or NOTICE OF	
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") mus  (a) ☐ including changes required by the Notice of Draftspers		TO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date	,	10-540) attached	
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	s Amendment / Comment or in the second secon	awings in the front (not the back) of	
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>			
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☐ Information Disclosure Statements (PTO/SB/08),</li></ul>	5. ☐ Notice of Inform 6. ☐ Interview Summ Paper No./Mail 7. ☒ Examiner's Ame 8. ☒ Examiner's State 9. ☐ Other	ary (PTO-413), Date	

Application/Control Number: 10/574,632 Page 2

Art Unit: 3662

## **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas Sprinkle on 6/15/2010.

The application has been amended as follows:

Claim 57 line 1, "in accordance with claim 55" is amended to –in accordance with claim 67—

Claim 58 line 1, "in accordance with claim 55" is amended to –in accordance with claim 67—

Claim 60 line 1, "in accordance with claim 55" is amended to –in accordance with claim 67—

Claim 61 line 1, "in accordance with claim 55" is amended to –in accordance with claim 67—

Claim 67, line 1, "a method of distance measurement" is amended to –an apparatus for distance measurement—

Claim 68, line 1, "a method of distance measurement" is amended to –an apparatus for distance measurement—

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Art Unit: 3662

## Allowable Subject Matter

2. Claims 34-35, 38-42, 45-54, 56-62, and 65-68 are allowed.

3. The following is an examiner's statement of reasons for allowance: Lai et al (US 2003/0035097), Lewis et al (US 6950177), and Ogawa et al (US 2002/0145725) do not teach nor make obvious a detection threshold is applied to the amplitude function for the detection of the changes in the noise caused by the signal pulses and the respective associated object distance is determined in the amplitude function for the signal pulses (15) on the basis of at least one point in time at which the detection threshold is passed through.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY A. BRAINARD whose telephone number is (571)272-2132. The examiner can normally be reached on Monday - Friday 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A. B./ Examiner, Art Unit 3662

> /Thomas H. Tarcza/ Supervisory Patent Examiner, Art Unit 3662